

Ru 7004 Box 30

F. 8

Laconic
~~etc.~~ Limestones

~~70~~

The condition of the limestones in the dark shales & purple & green slates leads to the conclusion that in many instances they are a conglomerate derived from a preexisting formation but as we find ~~interbedded~~ limestone in layers in the slate & without doubt ~~was~~ deposited contemporaneously with it & the conglomerate associated & containing the same fauna as the bedded layers we must look for some other explanation for the conglomerate limestone. A study of numerous localities suggests two modes of origin -

1st. The formation of
small irregular
masses of limestone
two millimetres in diameter
~~the size of a shingle~~
a metre in diameter
& even ~~600~~ feet thick
& several miles in area
as in Georgia U.S.A.
The masses appear to be
~~the~~ ~~have originated from~~ the aggregation of calcareous
matter on the sea bed
& usually numerous
fossils occur in ~~the~~ the
larger ones.

2d. By the formation of
calcareous layers on the
sea bed & their breaking
up after partial
consolidation & intertonguing
by the pressure of the
accumulating sedi-
ments above & the
~~soft~~ yielding nature of
Bullard & Myrick.

the clays beneath.

In many instances the rock looks like a great pudding stone - the hecated pieces of limestone having been broken & pressed in all directions thro' the plastic clays.

By the same pressure the concretions masses were crowded irregularly thro' the clays without any loss of the general character of the conglomerate & does not appear to be that of the accumulation on a sea beach - though in places it is difficult to say whether we are looking at a conglomerate or a rock broken & mixed up

at plastic matrix
by pressure +

Feb 13-86
at the ~~Rock Hill~~ School
House in north part
of Greenwich bed
bedded & carbonaceous
certain ~~lacomic~~ fossils.

~~H. - incis~~
~~Q. - asaphides~~ -
~~This is a fine locality to collect at.~~

This & the East Hebron
locality are fine illustrations
of the bedded & carbonaceous
~~Q. C. -~~ ^{Lacomic} fossils.

RU 7004 Bok 30 T. 8

May 4, 1988

May 4/88-

Atlantic Coast Cam-
brian.

With Prof. H. B. Shaler &
Mr. Fowle examined
Cambrian rocks in Atte-
borough, Mass.

The ^{greenish} reddish-pink &
brownish shales carrying
many carbonaceous layers
with fossils are much
like the Middle Cambrian
shales beneath the
Berlin Conglomerate of
Rensselaer Co., N.Y. The
fauna however is
more like that of
the western limit
of the Cambrian in
Rensselaer & Washington
Cos., N.Y. The presence

of a true *Paradoxides*[?]
in association with
the Middle Cambrian
fauna is also of the
Lower horizon of
New York is very
significant as it
points to *Paradoxides*
as older than the
true *Alenellus*.

Prof. Shaler's discovery
is a very important
one ~~proves~~ to the
presence of the
Alenellus fauna on the
eastern side of the
Green Mts & thus south-
ward of Terrian with
Connecticut.

Geologically it proves
the age of a large
area of hitherto-
undetermined rocks in
Eastern Massachusetts

The fauna is like that of the Arenellus horizon in the presence of Abatella crassa.

Polyalithes communis -

" Americana -

Microdiscus -

Stenotheca allied to S.
rugosa - (Coarsely ~~sub~~annulated variety) -

In the presence of Paradoxides & the absence of Arenellus it is ~~more~~ drawn towards the Paradoxides fauna & the type of Ptychoparia is also more ~~that~~ of the lower horizon. As a whole it is, with my present idea of the vertical distribution of the "Canthian fauna", ~~the~~ referred to the base

of the Middle Cambrian ⁴
fauna.